

Memorandum

Date: July 10, 2007

To: Ivan Paulsen
Department of Fish and Game
Post Office Box 1858
Portola, California 96122

From: Department of Water Resources

Subject: Revised Lake Davis Creel Census-2003

This memorandum corrects errors in a previous memorandum (dated May 30, 2007) that summarized and documented a survey of fishing at Lake Davis, Plumas County, in 2003, by the Department of Fish and Game. The survey was conducted to monitor angling use and catch following rediscovery of illegally introduced northern pike in the lake in 1999. The primary errors were in the estimates of boat and shore angling use and catch, which have been revised. Please destroy the previous memorandum.

California Department of Fish and Wildlife Scientific Aid Terry Banka, assisted by Darin Olsen and Jenay Champlin, surveyed anglers at various locations around the lake (See USFS description and map of Lake Davis Recreation Area). They censused 444 anglers during 15 days of the 204-day Sierra Trout Season, April 26 to November 15, and 62 anglers on six pre-season days (Table 1). Although Lake Davis can be legally fished all year, angling use in winter and early spring is greatly reduced by inclement weather and ice and snow conditions on and around the lake.

The 506 interviewed anglers had fished 1,723.5 hours with an observed catch (fish kept) of 214 rainbow trout. In addition, 53 rainbow trout were reported to have been caught and released (Table 2). No brown trout or northern pike were observed or reported during the census. About 83 percent of the shore anglers observed on the survey days were censused and about 19 percent of the boat anglers.

Boat anglers totaled 173 and fished 777.75 hours with a recorded catch of 133 rainbow trout. Boat anglers reported catching and releasing an additional 21 rainbow trout. Shore anglers totaled 333 and fished 945.75 hours with a recorded catch of 81 rainbow trout. They also reported catching and releasing 32 additional rainbow trout.

About 64 percent of the anglers censused at Lake Davis in 2002 lived in California and 36 percent were from Nevada. Two boat anglers were from Oregon.

Angler success varied among the several surveyed locations around the lake. Nearly all (93 percent) of the boat anglers interviewed were at Honker Cove, although vehicle counts indicated about 16 percent of boat anglers launched at Mallard Cove during 2003 (Table 3). Since boat anglers can fish nearly anywhere on the lake, angler success by location is not meaningful. About half (51 percent) of shore anglers interviewed during 2003 were fishing at Mallard Cove. The highest rates of catch per hour were recorded at Honker Cove and Fairview Point. The lowest rates were at Eagle Point and Camp 5, where no trout were recorded (Table 4).

Lake Davis Recreation Area

Beckwourth Ranger District

Lake Davis is located seven miles north of Portola, California. This lake was created in 1967 for recreational opportunities. The Lake Davis Recreation Area offers a wide variety of summer outdoor experiences including: camping, picnicking, fishing, hunting, boating, mountain biking, swimming and wildlife viewing. Water-skiing and jet skis are not permitted. Frequent strong winds can cause the lake to become very hazardous for small craft. In the winter, ice fishing, snowmobiling and cross-country skiing are favored activities.



Camping

A concessionaire manages three campgrounds around Lake Davis. Grizzly, Grasshopper Flat and

Lightning Tree Campgrounds have approximately 144 family camping sites, 21 double sites and 1 group site. Campsites may be reserved through Reserve USA (1-877-444-6777 or on-line at www.ReserveUSA.com).

Grizzly and Grasshopper Campgrounds have piped water and flush toilets. Coin-operated showers are available at Honker Cove Boat Ramp. Trailers of up to 35 feet can be accommodated. No hookups are provided. Facilities are usually open from late April through late October. Lightning Tree Campground has vault toilets and is open year-round except when closed by snow.



Fishing

There are twelve fishing accesses on Lake Davis. Some have toilets and picnic tables are available at Coot

Bay Fishing Access. Fishing is regulated by the California Department of Fish and Game with a five trout limit and tributary restrictions. If any of the invasive species Northern Pike are caught immediately cut off its head. Below Lake Davis, almost three miles of Big Grizzly Creek is open to fishing for day use on a public access strip. Native and stocked trout occur in the lake.

Varieties include Rainbow, German Brown and Eagle Lake Trout as well as Largemouth Bass and Brown Bullhead.



Boat Launching

Camp Five, Honker Cove, Mallard Cove, and Lightning Tree Boat

Ramps all have paved launching ramps, floating boat docks, toilets and paved parking lots. Camp Five Boat Ramp also has a universally accessible Fishing Levee 100 feet long for deeper water fishing.



Hunting

Mule deer, black-tailed deer, waterfowl, quail, and some small game may be hunted in-season in

the Lake Davis Recreation Area. The California Department of Fish and Game regulates hunting seasons and permits. Discharging a firearm within 150 yards of a campsite, across or on a Forest road or body of water is prohibited.



Area Interests

Smith Peak Lookout, located about seven miles southwest of the dam, provides a good view of the lake

and an opportunity to learn about the job of a fire lookout. It is operated full time during fire season and visitors are welcome. Lake Davis is also home to several interesting species of birds. Eagles and osprey can be seen at different times of the year, as well as hawks and owls.



Supplies

Supplies can be purchased in the town of Portola, seven miles south of Lake Davis.



Drinking Water

Only water from developed recreation sites is maintained for safe drinking. Open water sources are easily

contaminated by human or animal waste. Water from springs, lakes, and streams should be properly treated before drinking.



United States
Department of
Agriculture



Forest Service
Pacific Southwest Region
Plumas National Forest
www.fs.fed.us/r5/plumas

Beckwourth Ranger District
Box 7, Blairsden, Ca. 96103
Phone: (530) 836-2575
Revised 05/15/06

Lake Davis Recreation Area Plumas National Forest

In Case of Emergency
Fire / Medical / Sheriff:
Call 911

A pay telephone is located in
Grasshopper Flat Campground

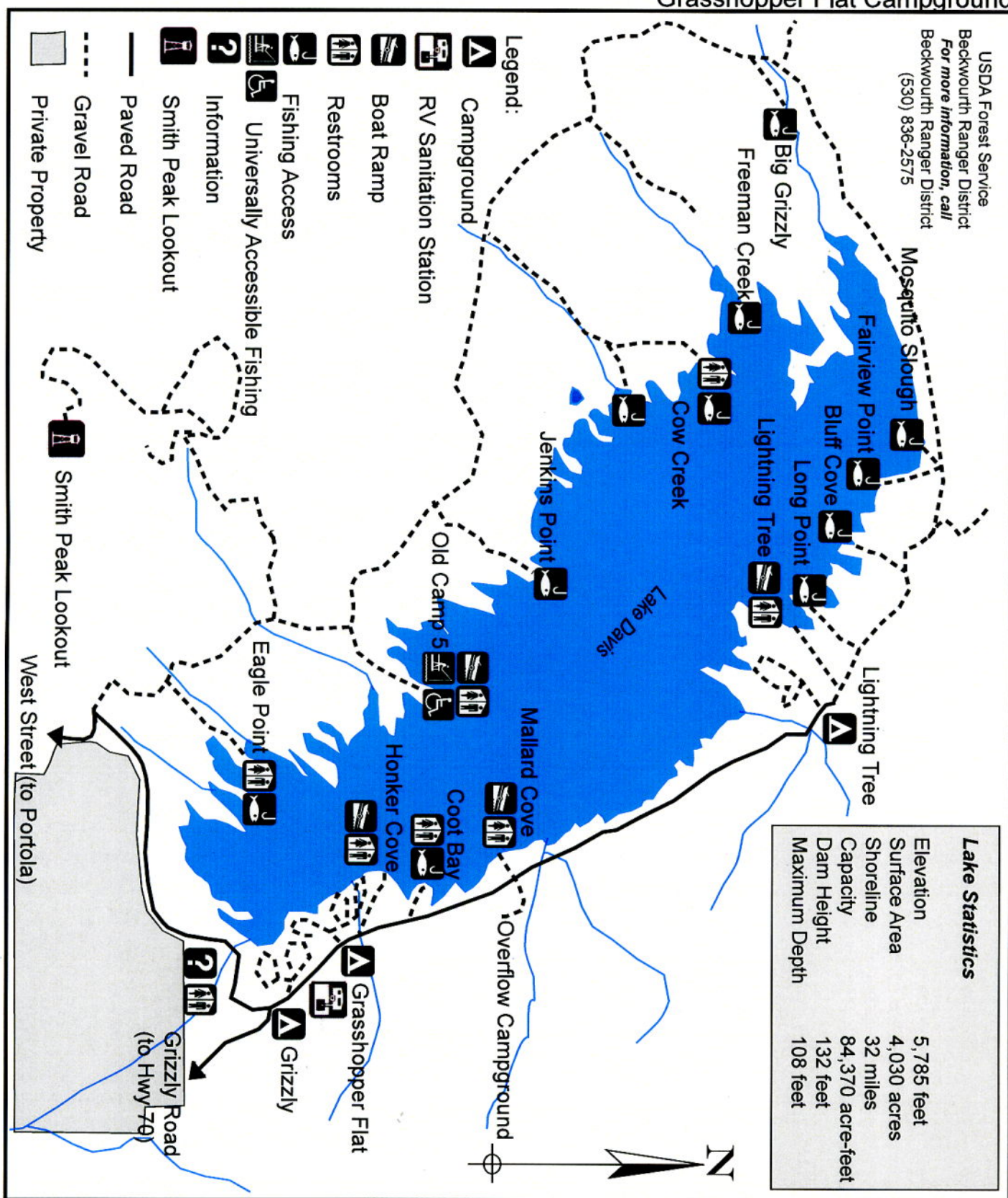


TABLE 1. 2003 RECREATION SEASON STRATA - DFG DATA

STRATA	PORTION OF ANGLING SEASON	DAYS IN	ANGLERS	DAYS	VEHICLE
		STRATUM	INTERVIEWED	SURVEYED	COUNTS
I	April 26-27 (Opening Weekend)	2	19	1	1
II	May 24-26 (Memorial Day Weekend)	3	123	2	2
III	May - June Weekends (includes 47 pre-season anglers)	16	122	3	1
IV	May - June Weekdays (includes 15 pre-season anglers)	45	57	4	1
V	July - August Weekends	14	33	1	1
VI	July - August Weekdays	43	11	1	1
VII	September-October-November WE	21	35	1	1
VIII	September-October-November WD	54	25	2	1
IX	July 4 and Labor Day Weekends	6	81	2	2
	Totals for Season	204	506	17	11
	Census Clerks:				
	Terry Banka - 9 Days				
	Darin Olsen - 1 Day				
	Jenay Champlin - 2 Days				

TABLE 2. SUMMARY OF ANGLER CENSUS AT LAKE DAVIS, 2003

Type of Angler	Anglers Interviewed	Hours Fished	Rainbow Trout Kept	Brown Trout Kept	Kept Trout Catch/Hr	RT & BN Trout C&R 1/	All trout Catch/Hr
Boat Anglers	173	777.75	133	0	0.17	21	0.20
Shore Anglers	333	945.75	81	0	0.09	32	0.12
Float Tube Anglers	None	0.00	0	0	0.00	0	0.00
All Anglers	506	1,723.50	214	0	0.12	53	0.15
1/ C&R = Caught and Released							

TABLE 3. CATCH OF TROUT BY BOAT ANGLERS AT LAKE DAVIS BY LOCATION, 2003

	Anglers Interviewed	Hours Fished	Rainbow Trout Kept	Brown Trout Kept	Kept Trout Catch/Hr	RT & BN Trout C&R	All Trout Catch/Hr
Honker Cove	161	738.75	129	0	0.17	21	0.20
Coot Bay	8	35.00	4	0	0.11	0	0.11
Fairview Point	2	3.00	0	0	0.00	0	0.00
Mallard Cove	2	1.00	0	0	0.00	0	0.00
Totals	173	777.75	133	0	0.17	21	0.20

TABLE 4. CATCH OF TROUT BY SHORE ANGLERS AT LAKE DAVIS BY LOCATION, 2003

	Anglers Interviewed	Hours Fished	Rainbow Trout Kept	Brown Trout Kept	Kept Trout Catch/Hr	RT & BN Trout C&R	All Trout Catch/Hr
Miscellaneous <u>1/</u>	9	35.75	10	0	0.28	0	0.28
Honker Cove	73	224.50	19	0	0.08	24	0.19
Fairview Point	28	49.50	9	0	0.18	0	0.18
Mallard Cove	170	488.50	39	0	0.08	8	0.10
Coot Bay	38	121.25	4	0	0.03	0	0.03
Eagle Point	11	22.25	0	0	0.00	0	0.00
Camp 5	4	4.00	0	0	0.00	0	0.00
Totals	333	945.75	81	0	0.09	32	0.12
<u>1/</u> Dam area and Mosquito Slough							

The average total length of 159 measured rainbow trout was 416 mm (16.4 inches) with a range of 253 to 545 mm (10.0 to 21.3 inches) (Figure 1). During the 2003 season the total lengths of trout were measured to the nearest millimeter.

DFG planted 46,400 catchable-sized Eagle Lake rainbow trout in Lake Davis between April 17 and June 12, 2003. (Table 5).

On 11 survey days, three times each day, the census clerks also counted boat trailers, vehicles with cartop boats, other vehicles, and shore anglers at Honker Cove, Coot Bay, Mallard Cove, and Lightning Tree boat ramps and occasionally at other locations. This information was intended to provide estimates of boat and shore fishing and total catch for the season.

Counts made during only 11 days ordinarily not provide enough data to make an accurate estimate of fishing use for a 204-day season. However, at least one day was surveyed in each survey stratum (similar period of days) during 2003, so these data provide a reasonably unbiased, if relatively inaccurate estimate.

In addition, some boat trailers and shore anglers were at locations not readily visible to the census clerks. However, virtually all boating use at Lake Davis is for fishing, since waterskiing and related boating recreation are not permitted.

Over 93 percent of the observed vehicles were at Honker Cove and Mallard Cove boat ramps in 2003 (Table 6). About 92 percent of the boats were trailered and 8 percent cartop. Nearly 60 percent of the vehicle license plates were from California, with just over 40 percent from Nevada, and a few other states.

Estimated boat fishing in 2003 totaled 85,000 hours (confidence interval \pm 38,000) with an estimated catch of 14,600 trout (0.17 per hour). Shore fishing totaled 33,000 hours (confidence interval \pm 11,500 hours) with an estimated catch of 2,900 trout (0.09 per hour). Anglers also reported they caught and released approximately 3,400 additional trout (Table 7). As the confidence intervals suggest, these are imprecise estimates which should be used with caution.

Interviews of anglers who had finished fishing for the day provided information on the average length of a completed angler-day, which allowed calculation of angler-days and trout caught per angler-day.



Ralph N. Hinton
Retired Annuitant

cc: Kathy Hill, Fisheries Management District Supervisor
Department of Fish and Game, Region 2
1701 Nimbus Road, Suite A
Rancho Cordova, California 95670

**FIGURE 1. LENGTH OF RAINBOW TROUT
CAUGHT AT LAKE DAVIS IN 2003**

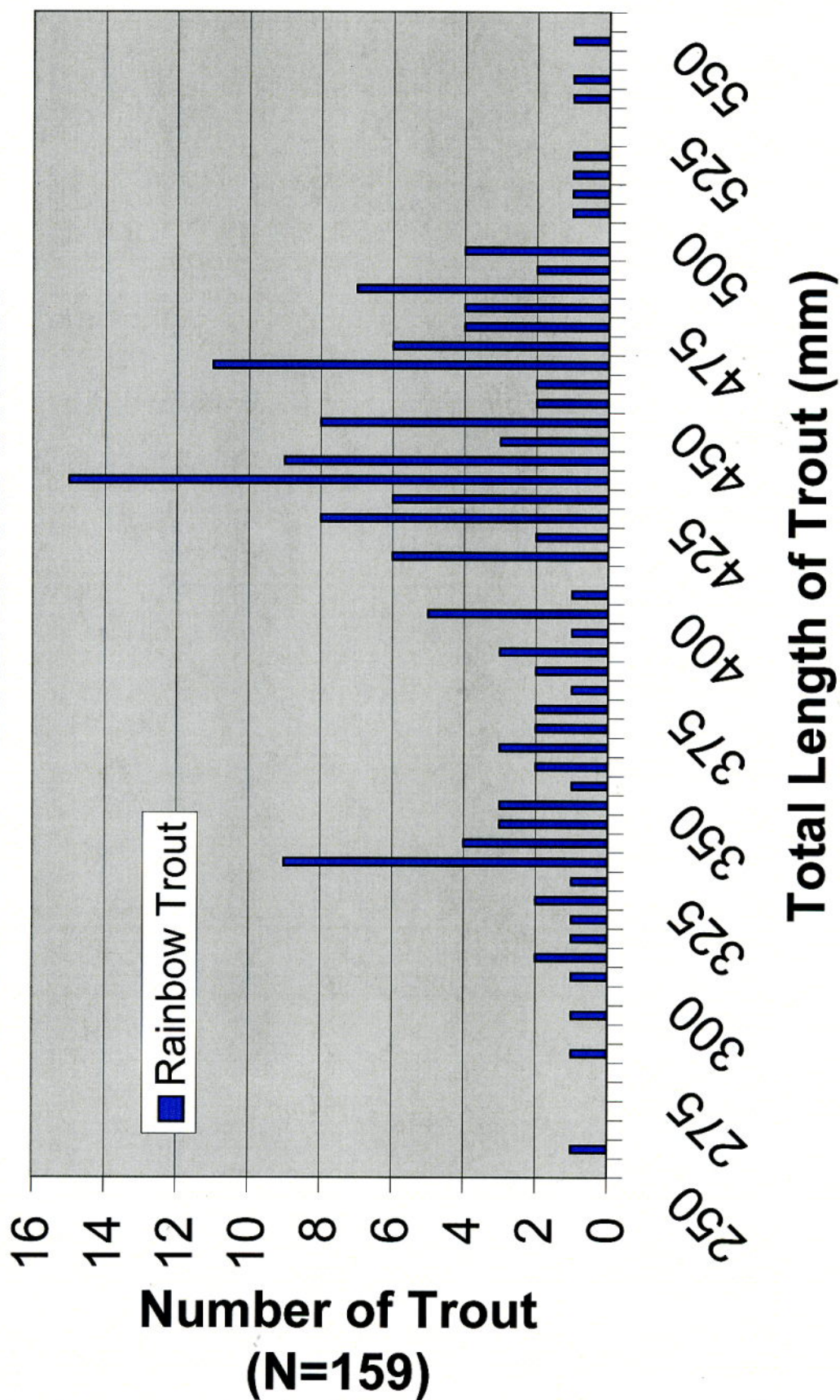


TABLE 5. TROUT PLANTING SUMMARY FOR LAKE DAVIS, 2003

Species	Date	Number	Pounds	Number/lb.
Eagle Lake Rainbow	04/17/03	10,000	5,000	2.0
Eagle Lake Rainbow	05/19/02	8,500	5,000	1.7
Eagle Lake Rainbow	06/02/03	5,400	3,000	1.8
Eagle Lake Rainbow	06/09/03	3,825	2,125	1.8
Eagle Lake Rainbow	06/11/03	3,960	2,200	1.8
Eagle Lake Rainbow	06/11/03	7,425	4,125	1.8
Eagle Lake Rainbow	06/12/03	7,290	4,050	1.8
Totals		46,400	25,500	1.8

TABLE 6. BOAT RAMP USE, 2003

Ramp	Percent
Honker Cove	78%
Mallard Cove	16%
Coot Bay	5%
Lightning Tree	1%
Total	100%

TABLE 7. ESTIMATED TOTAL ANGLER USE AND TROUT CAUGHT AT LAKE DAVIS, 2003

Type of Angler	Estimated Angler-Hrs	Est. Trout Caught	Catch per Angler-Hour	Length of Angler-Day	Estimated Angler-days	Catch per Angler-Day	Estimated Trout C&R
Boat Anglers	85,000	14,600	0.17	4.74	17,900	0.82	2,300
Shore Anglers	33,000	2,900	0.09	3.38	9,800	0.30	1,100
All Anglers	118,000	17,500	0.15	4.29	27,700	0.63	3,400